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Women in agriculture



Economic Factors to be Considered in Connection  
for Extension Work Among Farm Women.

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Since there is very little information regarding the economic position of the farm woman, it is necessary to approach the problem by the indirect method and use such material as will point out some of the factors influencing her life. It has been assumed in many of the discussions of our rural problems, that the social influences and factors were predominant. However, a study of those influences which affect the farm woman's life, her happiness, and prosperity, are found to have an economic basis. The economists tell that there is a flow of labor from one class of occupation, from one region to another, similar to the flow of money or gold from the different money markets in the world. Anything that tends to upset the supply or demand of labor sets in motion the migration from one part of the country to another, or from one country to another.

Among the factors upsetting the equilibrium of the supply of female labor in our rural and urban districts, are difference in death rate, difference in birth rate, increased efficiency, and migration. When we compare the death rate for females of the same age, we find that the rate is higher in urban than in rural districts, with the exception of a few years in the middle life. The influence of the higher death rate in the city than in the country is evident when we compare the average age at death of the persons in the rural and urban districts. We find, for example, that when we compare the average age at death



for the native born of native parentage, that it is 38.2 years in the rural districts, and in the city 31.4 years. If we consider that the average person becomes productive at 15 years of age, this would mean that the average male in the rural district would have a productive life of 23.2 years in the rural district and 16.4 years in the city, a difference in favor of the person living in the rural district of over 40 per cent. In the case of females, we find also that the difference between the average age at death is  $5\frac{1}{2}$  years. The average length of the productive life of the woman in the country being 25.7 years and in the city 20.2 years, indicates a difference in favor of the rural districts of over 20 per cent. The returns also indicate that the difference between the males and females in rural districts is 2.5 years in favor of the females, whereas in the case of the males and females in urban districts, it is 3.8 years in favor of the females. In other words, the conditions under which women work and live in the rural districts, when compared with the conditions under which the men work and live in the same districts, apparently more closely correspond as to healthfulness, than the conditions for men and women in the city. This difference in the healthfulness of the rural and urban districts has a marked influence upon those who have reached the productive age period. We find that the average age at death of those who have reached 15 years of age is 59.1 years for the females, native born of native parentage, in rural districts, as compared with 55.3 years in the urban districts. This difference in the average age at death of women has an important economic bearing not only upon the length of her working life but upon the possibility of increasing the number of children that may be born to her.

A second factor to be considered is the difference in the birth rate. We find that the average number of children born to women under 45 years of age and married from 10 to 19 years, who are native born of native parentage, living in



urban Ohio and Minnesota, was 2.4. In other words, if these cities were entirely dependent upon the children of the native stock they would fall 20 per cent short of reproducing their kind. However, when we turn to the rural sections of these states, we find that the average number of children born is 3.4 indicating that the rural women are not only maintaining their own, but adding 10 to 15 per cent to the population. To make up the deficiency in the urban population and to increase the supply of labor necessary to carry on their growing industries, it is necessary for the cities to import labor from the rural districts and from foreign countries, and even after the foreigner comes into the city, apparently the economic and social conditions of the city tend to make the foreigner have a lower birth rate than the same class in the rural districts. That the city has a marked sterilizing influence upon its women is evident when we compare the percentage of those bearing no children. Bearing in mind that these women have been married from 10 to 19 years, we find that in the case of urban Ohio, one out of 7 failed to bear any children and in urban Minnesota, one out of 8. However, when we turn to the rural parts of these states, we find that only one out of 18 or 19 failed to have children. Since the women in the rural districts marry at younger ages and in greater numbers, and live longer lives, this offers an explanation in part for the higher birth rate, but when we compare the average number of years married per child born, we find that as a rule the rate is much higher in the city than in the country.

The third factor to be considered is increased efficiency. Thirty or forty years ago 50 per cent of those who were gainfully employed were employed in agriculture. However, today about one-third of those "gainfully employed" are employed in agriculture. In the meantime, there has been an increase per capita production of crops and vegetables, and live stock produce has maintained its own or increased slightly as regards certain items. The farmer, by the use of







improved machinery, the better distribution of his labor throughout the year, and the more economical employment of horse and other power on the farm, has increased his efficiency so that 15 per cent of those formerly employed in agriculture are released to go into other occupations. Of course, this has affected equally the males and females.

If we examine the curve made by determining the percentage of persons of the same age and sex living in rural districts, we will find that for the United States as a whole, there is a tendency for the percentage at 10 years of age to be slightly higher than at 5 years. Apparently, the higher death rate in the city than in the country causes a larger proportion of those who are 5 years of age to survive in the rural districts, with the result that the percentage tends upward. Beginning with 10 years of age, the migration from rural districts sets in, the women migrating in larger numbers and at earlier ages. At 35 years of age the migration practically ceases and the higher death rate in the city than in the country causes the curve to rise again. This curve is more or less typical for all of the geographic divisions. However, consideration should be given to the proportion living in the city and in city and in the country in determining the trend of the curve. For example, in the New England States, where apparently only one out of 5 persons live in the rural districts, the higher death rate in the city than in the country has quadrupled effect, with the result that between 5 and 35 years, the curve is practically a straight line. However, in the South Atlantic States, where 4 persons are living in rural districts to one in the city, the influence of the migration from rural districts is sufficiently strong to cause the curve to tend downward. If we plot a similar curve for conditions in England and Wales we will find that it has the same characteristics in showing that the women are leaving the rural districts faster than the men and that the minimum is reached between 25 and 35 years of age.



However, when we plot the curve for conditions in Austria and Germany, it indicates that the men are leaving the country faster than the women.

Another method of indicating what the influence of the migration of women is, is to determine the percentage of males in the rural and urban population. We find that at 5 years of age, for the United States as a whole, there is an excess of males in the rural and urban districts and that this excess is greater in the rural districts. The women migrating faster and at earlier ages than the men causes the curve to tend upward, but as soon as the migration of the men is in full sway, the curve comes back to normal. The migration of women is sufficiently larger than that of the men to cause an excess of females in our cities after the 15 year age period is reached. A striking exception to this condition is found in the Southern States. Among the native whites, we find that there is an excess of females in the middle age groups. If we determine the counties which have an excess of females in the rural districts, we will find that they are few and scattered for the whites, whereas for the negroes the majority of the counties in the Southern States have an excess of females in the rural population, and a study of the distribution of the sexes by ages reveals the fact that this excess is due to an excess of females in the middle age groups. Thus, it is evident that apparently the same conditions that cause an excess of females in the middle age groups among the native whites, is having an even stronger effect upon the negroes.

In order to indicate the importance of women in the agricultural systems of the different countries, the percentage of those gainfully employed in agriculture was ascertained. It was found that in Austria and Germany between 45 and 50 per cent of those gainfully employed in agriculture were women, and in the case of the East South Central, South Atlantic, and West South Central States, between 20 and 25 per cent, and in the Northern and Western geographic



divisions, only 3 or 4 per cent were so employed. In England and Wales, the per cent was 3.3. In other words, the economic importance of women in the system of farming tends to influence her movement from the rural to the urban districts. Thus, if it is considered advisable to keep a larger proportion of women on our farms, it will be necessary to make farming as economically attractive as the nearby towns.

The employment of women in agriculture may influence the standard of living as well as the standard of farming. Let it be assumed that the standard of living and the standard of farming are represented by an income of \$1,000. Let it be further assumed that the woman by her efforts, produces \$100 worth of produce. The standard of farming can be reduced to the \$900 grade and the \$1,000 standard of living maintained, or the standard of farming may be maintained and the standard of living raised to the \$1,100 grade.

Both of these tendencies are taking place in the United States. In connection with the growing of beets, onions, and other intensive crops, women are being employed in the field to the detriment of their health and that of their children and their intellectual and spiritual development. The employment of negro women in the cotton fields in the South is bringing about a type of farming which results in economic and social conditions under which the whites will not live, with the result that there is developing wherever the negro is getting extensive hold of the land, black belts in the South. In the New England and Middle Atlantic States, the foreign farmer, with his cheap source of labor in his wife and children, is able to outbid the native farmer for the possession of the land, so that during the last 30 years there has been an actual decrease in the native born population, the foreigner and his children increasing from 10 to 40 per cent. In the middle west, the extensive use of agricultural machinery and the better distribution of the labor throughout the year, has taken away from



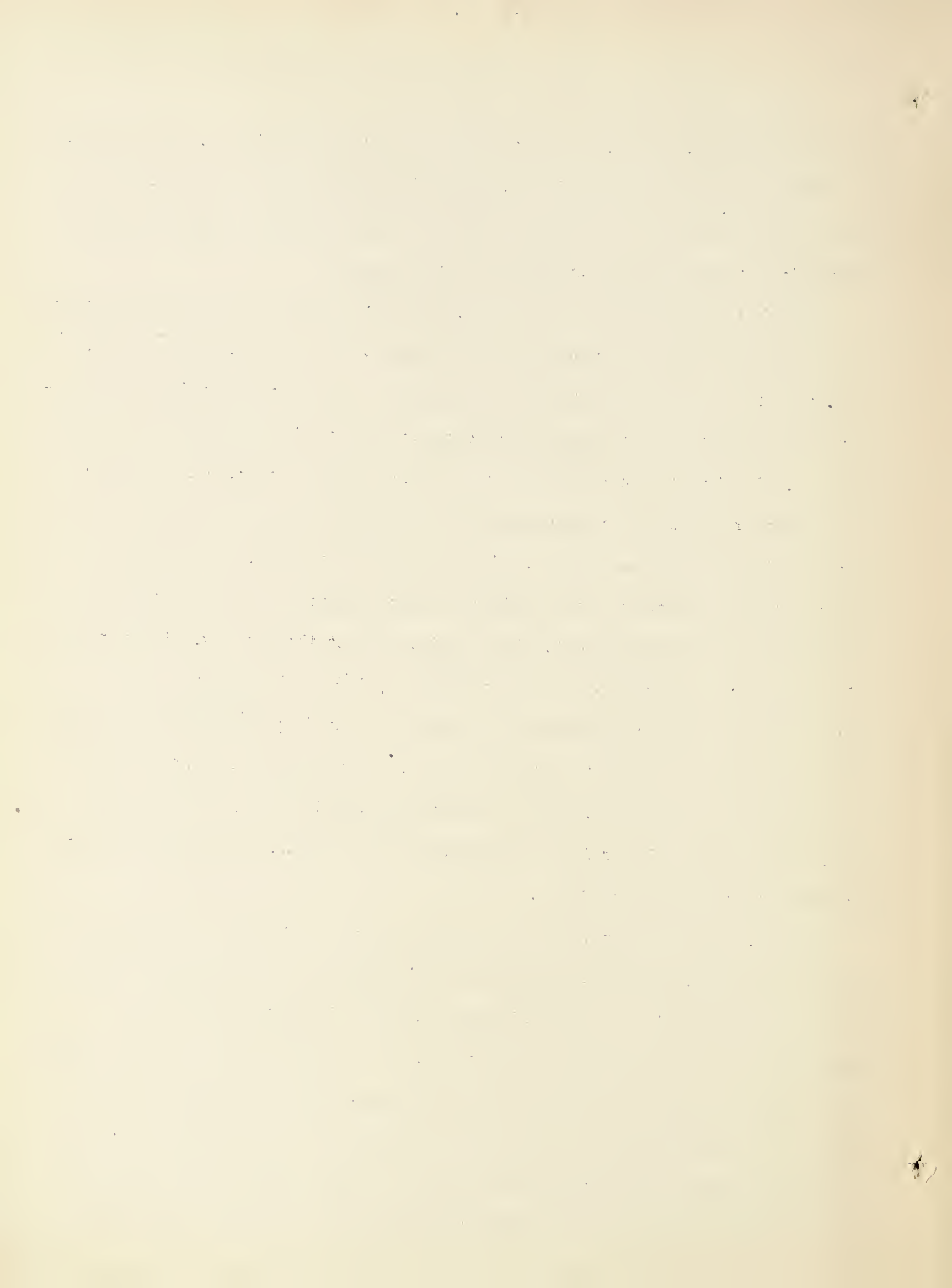


woman her economic importance in the type of agriculture which is being carried on, with the result that in these regions she is leaving the farm more rapidly than in any other part of the United States. This, in spite of the fact that probably the farm incomes are higher in these regions.

Another economic factor to be considered is the relationship of the management of the home and the management of the farm. It is considered good farm economy to produce on the farm the raw material to feed the animals and to produce this material in the proper proportions to give the live stock a balanced ration. It should also be considered good farm economy to produce on the farm the necessary articles to comprise the food of the farm family and this in proportion to make a suitable diet. We have no definite information regarding what the farm contributes to the farmer's living, except a few studies made by the Office of Farm Management. These indicate that the farms visited purchased  $1/6$  of the animal products,  $1/3$  of the fruits,  $1/5$  of the vegetables. The value of these purchases equalled the income received by  $2/5$  <sup>of those</sup> who had cooperated with the Northern and Western office in their farm management demonstrations. In other words, if these represent the average condition,  $2/5$  of the farmers spent their entire labor income in purchasing those things, the greater part of which they might have produced.

Thus, it seemed important to examine the census to ascertain what light it could give regarding the relationship of the farm and the home supply of meat, fruits, and vegetables. It can be assumed that if a certain animal is not slaughtered on a farm that there is not present this home supply of meat. Pork, which comprises one of the principal meats consumed on farms, apparently is absent in a marked degree from the system of farming as now carried on. In the New England States, apparently only one out of 3 farms report swine slaughtered. In other words, 2 out of 3 farms purchased all the pork consumed. In the Middle





Atlantic States, 3 out of 5 reported swine slaughtered and even in those regions having the largest proportion of farms reporting swine slaughtered, one out of 3 failed to report this source of food supply. In the far Western States, only one out of 4 reported swine slaughtered. Then we come to the dairy cow, we find that she is present on most of the farms. However, even in the most favorable regions, she is absent on one out of 10 farms. Since the home dairy industry is so closely connected with the work of the farm woman, it is interesting to note that only 16 per cent of the farms reported raw milk sold, whereas 75 per cent of the farms reporting dairy cows reported butter made on those farms. Apparently, the farm made butter comprises 60 per cent of the butter made in the country and 40 per cent of the butter of commerce. Poultry, although present on practically all of the farms, occur in such small numbers as to be, as a rule, but a small source of income. Farm management studies indicate that a flock of 100 head with a little extra care and attention, can be made a good source of minor income for a farm. It is interesting to note that the value of the home made butter and the production of poultry and eggs on the farm are exceeded in value by only 4 crops; cotton, wheat, corn, hay and forage. Yet, in our extension work these do not seem to be receiving the attention their importance would indicate.

Per cent of all farms reporting animals slaughtered, dairy cows and fowls.

Division	Animals Slaughtered				Dairy Cows:	Fowls	
	Cattle	Calves	Swine	Sheep		%	Av.No.
	%	%	%	%		%	Av.No.
New England	9.0	5.7	35.4	1.8	77.9	79.8	47
Middle Atlantic	15.6	8.9	57.2	1.3	85.5	91.5	61
East North Central	10.5	6.2	65.8	1.2	89.9	93.1	69
West North Central	17.8	5.7	64.5	1.3	89.1	90.8	88
South Atlantic	4.7	1.9	60.0	1.0	71.5	87.4	29
East South Central	4.5	1.2	57.3	0.9	78.2	86.1	30
West South Central	5.0	1.7	51.8	0.3	76.6	85.7	39
Mountain	12.5	5.0	26.5	3.0	65.6	69.2	45
Pacific	9.1	13.0	27.2	1.6	73.6	78.1	69



Another important source of the farm food supply is vegetables. Potatoes, a crop which we consider as universally grown and eaten, were absent on one out of 4 farms in the New England States; one out of 7 in the Middle Atlantic States, and in the far West one out of 3. We also find that the conditions were similar regarding the vegetable garden.

Per cent of farms reporting potatoes and vegetables.

Division	Potatoes		Sweet Potatoes		Vegetables, Exc. Potatoes	
	1909	1899	1909	1899	1909	1899
New England	79.1	81.7	*---	*---	78.5	62.1
Middle Atlantic	85.5	95.3	4.0	5.9	81.8	70.1
East North Central	77.0	72.9	3.5	5.7	75.0	63.1
West North Central	70.5	68.1	4.2	5.4	64.4	57.6
South Atlantic	31.5	28.1	43.5	43.9	70.9	66.1
East South Central	29.5	22.9	35.3	32.0	71.4	66.2
West South Central	30.1	19.1	17.3	18.5	50.5	53.7
Mountain	35.5	35.1	0.2	0.2	37.6	32.2
Pacific	36.6	38.2	0.6	0.4	49.9	39.3
United States	50.0	49.4	17.6	17.5	67.0	61.3

\* Less than one-tenth of 1 per cent.

The third great source of food on the farm is the fruit trees. However, in regions favorable to their production, we find that a large proportion of the farms failed to report any trees. Apples, a crop that can be almost universally grown in the Northern group of states, are absent as a rule on one of 3 or 4 farms, as were the other principal fruits, such as peaches, pears, plums and cherries. Even in the regions which would seem most favorable to their production about one out of 3 report this source of food for the home. Grapes, another important source of food, even in the most favorable regions, are only present in one out of 4 farms.



Per cent of the total number of farms reporting  
trees of bearing ages.

Division	: Apples	: Peaches	: Pears	: Plums	: Cherries	: Grapes
New England	: 72.1	: 6.8	: 25.6	: 13.2	: 8.4	: 10.1
Middle Atlantic	: 80.8	: 23.9	: 46.0	: 31.2	: 38.4	: 26.6
East North Central:	60.0	: 33.8	: 32.1	: 13.2	: 38.9	: 25.0
West North Central:	50.7	: 27.2	: 14.4	: 22.8	: 26.2	: 18.4
South Atlantic	: 44.7	: 32.5	: 18.1	: 10.3	: 12.9	: 12.5
East South Central:	34.8	: 32.9	: 12.4	: 8.9	: 7.2	: 7.1
West South Central:	11.1	: 29.0	: 9.8	: 11.4	: 4.6	: 5.5
Mountain	: 19.2	: 8.2	: 8.2	: 11.2	: 9.5	: 2.2
Pacific	: 37.2	: 19.2	: 23.2	: 29.1	: 24.3	: 13.0

Thus, in drawing up the extension projects, it would seem to be necessary that the person in charge of the extension work for women should call into conference the farm management specialist in order that he might advise her, or cooperate with her, in changing the system of farming whereby the crop system might be more evenly distributed throughout the year, so that the women and children will not be forced, during the rush season, to work in the fields beyond their strength or to a point which will injure their health. She might also need his advice in developing a farm industry which would give women a source of income.

Such studies as have been made indicate that a very small percentage of the farmers yearly receive an income sufficient to allow them to pay expenses of living and introduce extensive improvements in their homes. Thus, if the specialist in charge of the work for the farm woman wishes to improve the home, it may be necessary to introduce a new industry into the system of farming or to improve the farm conditions that the money will be made available, and in some instances this work may have to be undertaken by the farm woman herself. Further, if it is considered advisable to retain more women on the farms in a given community, a new industry may be required to give her employment.





In addition to the farm management specialist, the animal husbandry specialist should be consulted in order that there may be introduced a system of farming whereby the farm would at least produce its own supply of pork. The dairy specialist should be consulted in order that the quality and quantity of home made butter may be increased. The poultryman's advice should be sought in order to increase and make profitable the farm flock. There should also be called in to consultation, the horticulturist in order that the farm may have sufficient variety of fruits and vegetables to produce a balanced diet for the family and to provide fruit and vegetables for the entire year. Many of the operations advised by these men would probably mean that the farm woman should take them up herself, but care should be taken that the activities of the woman, outside of her home, do not lead to a condition which may remove from the farmer his responsibility in maintaining his present standard of farming. This can generally be avoided if the work is so arranged that the farm woman can retain absolute control over the products of her labor.

